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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/493,188	01/28/2000	Hidehiro Ishii	P7156-9071	1906

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EXAMINER

PATEL, GAUTAM

ART UNIT	PAPER NUMBER
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2627

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/493,188

Applicant(s)

ISHII ET AL.

Examiner

Gautam R. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-71 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 47-52, 56-58, 67, 68 and 70 is/are allowed.
- 6) ☒ Claim(s) 7-46, 53-55, 59-66, 69 and 71 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment/Arguments:

1. This is in response to amendment filed on 1/24/07.
2. Claims 7-71 are pending for the examination.
3. Applicant's arguments regarding rejection of claims 7-46 and 62-66 under 35 U.S.C. § 112 first & second paragraph have been fully considered and rejection of claims 7-46 and 62-66 under 35 U.S.C. 112 first & second paragraph has been **withdrawn**.

NOTE: It should be pointed out that nothing in that paragraph on age 21 indicates anything about time series or selection in a succession. Also when streams are intermingled inherently one has to select those streams one after another.

Claim Rejections - 35 U.S.C. § 103

4. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-46 and 62-66 are rejected under 35 U.S.C. § 102(e) as being anticipated by Heo, US. patent 6,167,192 (hereafter Heo).

As to claim 7, Heo discloses the invention as claimed [see Figs. 2-20 especially 2-8 and 14] including a video data recording area, a video manager recording area and control information indicating audio data intermingled from different recording modes, comprising:

· a video data recording area [fig. 2, VOBs] on which an audio stream containing audio data is recorded [col. 4, line 36 to col. 5, line 41]; and

a video manager recording area [fig. 2, VMGI] located in a different position from the video data recording area in a direction of a diameter of the recording medium, in which control information is recorded.

wherein the control information includes application information indicating

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whether or not the audio stream recorded in the video data recording area contains audio data intermingled from different recording modes as one stream [col. 4, line 36 to col. 5, line 41].

Heo discloses all of the above elements, including a controller and various mixed mode of audio data. Heo does not specifically disclose a mixed mode flag and these modes are selected in succession.

However, it is well known in the art that inherently one has to have a signal for modes. For example when commercial on TV comes on sound level goes up, this cannot be done unless one knows what mode is coming next. These concepts are well known and very old.

Also more importantly Kinoshita clearly discloses:

A mode signal which tell if the stream is a singular stream of one kind of a data or it is mixed data which contains various modes [such as monaural, bilingual etc.] in that stream [col. 5, lines 3-30 and fig. 1, unit 43]. NOTE: unit 43 produces this signal.

Both Heo and Kinoshita are interested in improving the audio data and using video environment for these different audio signals.

One of ordinary skill in the art at the time of invention would have realized that it would be advantageous to change the mode signal of audio streams automatically in system rather than change it manually.

Therefore, it would have been obvious to have used an automatic change-over mode signal in the system of Heo as taught by Kinoshita because one would be motivated to reduce time it takes to change the signals from one mode to another in the system of Heo and provide better audio signal controls and improve quality of the signals by switching the signals when different modes are selected [col. 1, line 64 to col. 2, line 10; Kinoshita].

5. The aforementioned claim 8, recites the following elements, inter alia, disclosed in Heo: the recording modes include monaural audio [mono], multi-channel [multichannel] audio and multiplexed [stereo] audio [col. 6, line 31 to col. 7, line 12; col. 16, lines 1-10].

NOTE: Stereo is a type of multiplexed audio.

6. The aforementioned claim 9, recites the following elements, inter alia, disclosed in Heo: the audio stream contains multiplexed audio data [col. 6, line 31 to col. 7, line 12].

7. The aforementioned claim 10, recites the following elements, inter alia, disclosed in Heo: the multiplexed audio data consists of a plurality of audio channels and contains multiple language data [col. 16, lines 1-10] in different audio channels [col. 5, Table 2; col. 9, lines 27-30; and col. 25, lines 1-63].

NOTE: sub-picture stream contains the language information for different audio channels.

8. The aforementioned claim 11, recites the following elements, inter alia, disclosed in Heo: the audio stream further contains multi-channel audio data, and wherein the application information indicates that the audio stream contains the audio data with different recording modes [col. 5, lines 19-43; Table 1].

9. The aforementioned claim 12, recites the following elements, inter alia, disclosed in Heo: the control information further includes number information indicating a number of audio channels in the audio stream [col. 5, line 6 to col. 6, line 10; Fig. 4 & 5; VTS_AST_Ns & VTS_AST_ATR].

10. The aforementioned claim 13, recites the following elements, inter alia, disclosed in Heo: the control information further includes number information specifying one of the recording modes [col. 5, line 6 to col. 6, line 10; Fig. 4 & 5; VTS_AST_Ns & VTS_AST_ATR].

11. The aforementioned claim 14, recites the following elements, inter alia, disclosed in Heo: the control information further includes rate information [sampling frequency] indicating a bit rate of the audio data [col. 9, lines 56-62; col. 10, lines 67; TABLE 21].

12. The aforementioned claim 15, recites the following elements, inter alia, disclosed in Heo: a recording device [fig.14, unit 104] which records audio data in a video recording area of the recording medium as an audio stream; and

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a generating device [fig.14, unit 102] which generates control information in video manager recording area located in a different position from the video data recording area in direction of a diameter of the recording medium,

wherein the recording device records the control information in a video manager recording area located in different position from the video data recording area in a direction of a diameter of the recording medium [col. 4, line 36 to col. 5, line 41 & col. 15, lines 23-50].

13. As to claims 16-22, they are claims corresponding to claims 8-14 respectively and they are therefore rejected for the same reasons set forth in the rejection of claims 8-14 respectively, supra.

14. The aforementioned claim 23, recites the following elements, inter alia, disclosed in Heo:
a reading device [fig. 14, unit 104] which reads the control information from the second recording area of recording medium; and

a controller [fig. 14, unit 104] which controls the reproduction of the audio data recorded on the first recording area of the medium based on the control information [col. 4, line 36 to col. 5, line 41 & col. 15, lines 23-50].

15. The aforementioned claim 24, recites the following elements, inter alia, disclosed in Heo:
the recording modes include monaural audio [mono], multi-channel [multichannel] audio and multiplexed [stereo] audio [col. 6, line 31 to col. 7, line 12].

NOTE: Stereo is a type of multiplexed audio.

16. The aforementioned claim 25, recites the following elements, inter alia, disclosed in Heo:
the audio stream contains multiplexed audio data [col. 6, line 31 to col. 7, line 12].

17. The aforementioned claim 26, recites the following elements, inter alia, disclosed in Heo
the multiplexed audio data consists of a plurality of audio channels and contains multiple language data in different audio channels [col. 6, line 31 to col. 7, line 12].

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the system further comprising operating device [fig. 14, unit 110] for selecting one of the multiple language data, wherein the controller controls the reproduction of the audio data such that only the selected [audio selection switch] one of the multiple language data is reproduced [col. 15, line 23 to col. 16, line 17].

18. As to claims 27-30, they are claims corresponding to claims 11-14 respectively and they are therefore rejected for the same reasons set forth in the rejection of claims 11-14 respectively, supra.

19. As to claims 31-38, they are method claims corresponding to claims 7-14 respectively and they are therefore rejected for the similar reasons set forth in the rejection of claims 7-14 respectively, supra.

20. As to claims 39-46, they are method claims corresponding to claims 23-30 respectively and they are therefore rejected for the similar reasons set forth in the rejection of claims 23-30 respectively, supra.

21. The aforementioned claim 53, recites the following elements, inter alia, disclosed in Heo:
A reading device [inherently present when data is recoded] which reads the control information from the video manager recording area of the recording medium; and
A controller [since data is managed controller is inherently present] which controls the reproduction of the audio data recorded in the video data recording area of the recording medium based on the control information [fig. 2 and col. 4, lines 36 to col. 5, line 23].

Heo discloses all of the above elements, including a controller and various mixed mode of audio data. Heo does not specifically disclose a mixed mode flag and these modes are selected in succession.

However, it is well known in the art that inherently one has to have a signal for modes. For example when commercial on TV comes on sound level goes up, this cannot be done unless one knows what mode is coming next. These concepts are well known and very old.

Also more importantly Kinoshita clearly discloses:

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A mode signal which tell if the stream is a singular stream of one kind of a data or it is mixed data which contains various modes [such as monaural, bilingual etc.] in that stream [col. 5, lines 3-30 and fig. 1, unit 43]. NOTE: unit 43 produces this signal.

Both Heo and Kinoshita are interested in improving the audio data and using video environment for these different audio signals.

One of ordinary skill in the art at the time of invention would have realized that it would be advantageous to change the mode signal of audio streams automatically in system rather than change it manually.

Therefore, it would have been obvious to have used an automatic change-over mode signal in the system of Heo as taught by Kinoshita because one would be motivated to reduce time it takes to change the signals from one mode to another in the system of Heo and provide better audio signal controls and improve quality of the signals by switching the signals when different modes are selected [col. 1, line 64 to col. 2, line10; Kinoshita].

22. The aforementioned claim 54, recites the following elements, inter alia, disclosed in Heo:

The control information also includes channel numbers [00b, 010b etc.] [TABLE 1 and TABLE 6].

23. The aforementioned claim 55, recites the following elements, inter alia, disclosed in Heo:

The channel number data indicates multiplexed audio data [stereo], multi-channel audio data, and monaural [mono] audio data [TABLE 3 and TABLE 6 & col. 6, line 31 to col. 7, line 12; col. 16, lines 1-10].

NOTE: Stereo is a type of multiplexed audio.

24. The aforementioned claims 62-66, recites the following elements, inter alia, disclosed in Heo

the video manger recording area is located inward of the video data recording area [fig. 2-3 and col. 4, line 36 to col. 5, line 41].

25. The aforementioned claim 69, recites the following elements, inter alia, disclosed in Heo:

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The video manger recording area is located inward of the video data recording area [fig. 2; col. 4, line 36 to col. 5, line 23].

26. As to claims 59-61 and 71, they are method claims corresponding to claims 53-55 and 69 respectively and they are therefore rejected for the similar reasons set forth in the rejection of claims 53-55 and 69 respectively, above.

27. Applicant's arguments with respect to claims 7-71 have been considered but are moot in view of the new grounds of rejection.

ALLOWABLE SUBJECT MATTER

28. Claims 47-52, 56-58, and 67-68, 70 are allowed over the prior art of record.

29. Heo and Kinoshita were cited as a prior art reference in previous paper.

30. Applicant's arguments with respect to claims 7-71 have been considered but are moot in view of the new grounds of rejection.

31. Applicant's amendment necessitated the new grounds of rejection presented in this office action. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Contact information

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

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The appropriate fax number for the organization (Group 2600) where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dwayne Bost, who can be reached on (571) 272-7023.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.



**GAUTAM R. PATEL
PRIMARY PATENT EXAMINER**

Gautam R. Patel
Primary Examiner
Group Art Unit 2627

March 8, 2007